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EXAMINER

MCFADDEN, MICHAEL B

ART UNIT

PAPER NUMBER

2188

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,408	<b>Applicant(s)</b> BEAN ET AL.	
	<b>Examiner</b> Michael B. McFadden	<b>Art Unit</b> 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. The instant application having Application No. 10/702408 has a total of 29 claims pending in the application, there are 3 independent claims and 26 dependent claims, all of which are ready for examination by the examiner.

## **II. INFORMATION CONCERNING OATH/DECLARATION**

### **Oath/Declaration**

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. ' 1.63.

## **III. INFORMATION CONCERNING DRAWINGS**

### **Drawings**

3. The applicant's drawings submitted 06 November 2003 are acceptable for examination purposes, but several deficiencies, observed by the draftsman, exist with respect to their form and are indicated on the PTOL-948 accompanying the instant office action (See M.P.E.P. ' 707.07(a)).

## **IV. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT**

### **Information Disclosure Statement**

4. As required by M.P.E.P. ' 609 (C), the applicant's submission of the Information Disclosure Statement dated 27 September 2004 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now

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pending. As required by M.P.E.P. ' 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

## **V. OBJECTIONS TO THE APPLICATION**

### **Abstract**

5. The abstract of the disclosure is objected to because of the following informalities:

6. In Line 1 the abstract reads, "Analyzing data on a network." This is not a complete sentence therefore grammatically incorrect.

7. Correction is required. See MPEP § 608.01(b).

## **VI. REJECTIONS NOT BASED ON PRIOR ART**

### **Claim Rejections - 35 USC ' 112**

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 2, 21, and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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10. **Regarding Claims 2, 21, and 23**, in Line 3 of Claim 2, Line 2 of Claim 21, and Line 4 of Claim 23 a reference is made to “graphing byte density over time”. Byte density is not adequately described in the disclosure. For the purposes of further examination the Examiner will interpret “graphing byte density over time” as “graphing network traffic over time”.

## **VII. REJECTIONS BASED ON PRIOR ART**

### ***Claim Rejections - 35 USC ' 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-6, 9-11, and 13-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)) and further in view of Leftwich (US Patent No. 6,356,256).

13. **Regarding Claim 1**, Cook discloses A method of analyzing network traffic on a network, the network traffic having been captured at a network monitoring computer during a period of time, the method comprising: at a user computer remote from the network monitoring computer, receiving data points corresponding to the captured network traffic, the data points comprising: for the captured network traffic, start time,

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end time, total frames and total bytes; and information about sections of the captured network traffic, the information including start time, end time, number of frames in the section and number of bytes in the section. **(See Cook: Figure 3)**

Cook fails to disclose storing a histogram, including the data points, at the user computer.

**Leftwich** discloses storing a histogram, including the data points, at the user computer. **(See Leftwich: Figure 4 and 3B)**

**Cook: Figure 3 shows the organization of network traffic. The number of packets, number of bytes, flow start and end time are all present in the network traffic information. Knowing the flow start time and end time gives you the total clock ticks of the capture. In Leftwich: Figure 4 the graph contains tabs for usage statistics and burst management. These would be relating specifically to network traffic. In Leftwich: Figure 3B it is shown in the picture that the graphical user interface is connected across a network to the data gathering mass storage device, therefore making it remote.**

Cook and Leftwich are analogous art because they are from the same field of endeavor, presenting communication performance history data.

At the time of invention it would have been obvious to one of ordinary skill in the art to use the graphical display of Leftwich to display the network traffic data of Cook.

The motivation for doing so would have been to make information easily perceivable by a user. **(Leftwich: Column 1, Lines 28-31)**

Therefore, it would have been obvious to combine the graphical display of Leftwich with the network traffic data collecting system of Cook for the benefit of making information easily perceivable by a user to obtain the invention as specified in claim 1.

**14. Claim 2 is rejected using the same rationale as Claim 1.**

**15. Regarding Claim 3,** Leftwich discloses presenting a user with a graphical user interface representation of the network traffic comprises: including a zoom window, the zoom window useful for highlighting a segment of the capture histogram, and representing the segment of the capture histogram in a zoom histogram.

**(See Leftwich: Figure 5A and 5B also See Leftwich: Column 5, Lines 44-51)**

**The user clicks and drags to create a zoom window and the zoom is then displayed as a response to the user input.**

**16. Regarding Claim 4,** Leftwich discloses including a data selection window useful for highlighting a segment of the zoom histogram; storing a first downloaded captured data file that includes sections corresponding to the segment of the zoom histogram highlighted by the data selection window; and displaying data frames corresponding to the highlighted segment of the zoom window.

**(See Leftwich: Column 5, Lines 37-42) The cursor is used to select a segment. Then the data points corresponding to the selection are shown in the histogram window, Figure 4, Element 36.**

**17. Claim 5 is rejected using the same rationale as Claim 4.**

**18. Claim 6 is rejected using the same rationale as Claim 1.**

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19. **Regarding Claim 9**, Cook discloses the histogram further comprising a listing and description of downloaded captured data files stored on the user computer, the method further comprising using the listing and description of downloaded captured data files to code portions of the capture histogram and the zoom histogram with a first indicator representing sections stored at the user computer.

**The system locates the files when it needs to access them for processing and displaying. Therefore, the system must contain indicators to locate the files it is using.**

20. **Claim 10 is rejected using the same rationale as Claim 9.**

21. **Claim 11 is rejected using the same rationale as Claim 9.**

22. **Regarding Claim 13**, Cook discloses downloading sections from the network monitoring computer that are not stored in downloaded captured data files at the user computer; and combining the downloaded sections with a downloaded captured data file that was previously stored at the user computer.

**The original files were taken from the network monitoring computer and used at the graphical user interface of the user computer to generate the histogram. If specific files or data is requested that is not at the user computer the network monitoring computer is still fully capable of providing data.**

23. **Regarding Claim 14**, Cook discloses saving the histogram for later use.

**See Cook: Column 6, Lines 43-44. Cook discloses storing the data in persistent storage.**



24. **Regarding Claim 15**, Cook discloses opening the histogram; determining if the histogram corresponds to network traffic stored on the network monitoring computer using timestamps; if the histogram corresponds to network traffic stored on the network monitoring computer, establishing a relationship between the network monitoring computer and the user computer such that network traffic existing on the network monitoring computer may be downloaded to the user computer.

**See Cook: Column 6, Lines 43-44. Cook discloses storing the data in persistent storage. If the system can store the data it also will be able to open the stored files.**

**The original files were taken from the network monitoring computer and used at the graphical user interface of the user computer to generate the histogram. If the saved file opens and specific files or data that is requested is not at the user computer the network monitoring computer is still fully capable of providing data**

- 25. **Claim 16 is rejected using the same rationale as Claim 14.**
- 26. **Claim 17 is rejected using the same rationale as Claim 1.**
- 27. **Claim 18 is rejected using the same rationale as Claim 1.**
- 28. **Claim 19 is rejected using the same rationale as Claim 1.**
- 29. **Claim 20 is rejected using the same rationale as Claim 1.**
- 30. **Claim 21 is rejected using the same rationale as Claim 1.**
- 31. **Claim 22 is rejected using the same rationale as Claim 13.**
- 32. **Claim 23 is rejected using the same rationale as Claim 1.**

**The Examiner takes Official Notice that a top-level folder for organizing data fields into a file structure, along with the naming of the files, folders, etc. that are associated with the file structure, would be obvious to a person of ordinary skill in the art. Many operating systems that have been used and that are used today include this function.**

**33. Regarding Claim 24 is rejected using the same rationale as Claim 23.**

**34. Regarding Claim 25 is rejected using the same rationale as Claim 23.**

**35. Regarding Claim 26 is rejected using the same rationale as Claim 23.**

**36. Regarding Claim 27 is rejected using the same rationale as Claim 23.**

**37. Regarding Claim 28 is rejected using the same rationale as Claim 15.**

**38. Regarding Claim 29 is rejected using the same rationale as Claim 1.**

39. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)), Leftwich (US Patent No. 6,356,256), and further in view of Mazumder (US Patent No. 6,580,959).

**40. Regarding Claim 7, Cook and Leftwich disclose presenting a user with a graphical user interface representation of the network traffic.**

Cook and Leftwich fail to disclose applying a compression algorithm to at least a portion of the information in the histogram.

Mazumder discloses applying a compression algorithm to at least a portion of the information in the histogram.

**Mazumder teaches using an efficient compression algorithm to enable fast transmission of a file. (Mazumder: Column 2, Lines 24-27)**

Cook, Leftwich, and Mazumder are analogous art because they are from the same field of endeavor, data monitoring and processing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to compress the histogram information of Cook and Leftwich with the compression algorithm of Mazumder.

The motivation for doing so would have been to enable efficient and fast transmission over a network. **(Mazumder: Column 2, Lines 24-27)**

Therefore it would have been obvious to combine the compression algorithm of Mazumder with the data monitoring and display system of Cook and Leftwich for the benefit of fast and efficient transmission over a network to obtain the invention as specified in claim 5.

**41. Claim 8 is rejected using the same rationale as Claim 7.**

42. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)), Leftwich (US Patent No. 6,356,256), and further in view of Jamieson et al. (herein Jamieson (US Patent No. 6,577,323)).

**Regarding Claim 12,** Cook and Leftwich fail to disclose using the listing and description of downloaded captured data files to color code portions of the capture histogram and the zoom histogram with a first color representing sections stored at the

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user computer, color coding portions of the capture histogram and the zoom histogram with a second color representing sections that were previously at the user computer, but that are not presently at the user computer; and color coding portions of the capture histogram and the zoom histogram with a third color representing sections that are not stored at the user computer or at the network monitoring computer.

Jamieson discloses using the listing and description of downloaded captured data files to color code portions of the capture histogram and the zoom histogram with a first color representing sections stored at the user computer, color coding portions of the capture histogram and the zoom histogram with a second color representing sections that were previously at the user computer, but that are not presently at the user computer; and color coding portions of the capture histogram and the zoom histogram with a third color representing sections that are not stored at the user computer or at the network monitoring computer.

**See Jamieson: Column 6, Line 60 - Column 7, Line 3. Jamieson teaches the use of color coding a graph according to varying indicators. The indicators may representative of many things. An indicator of data location is already part of the data file (see rejection rationale of Claim 7). The data plot can then be color coded according to data location.**

Cook, Leftwich, and Jamieson are analogous because they are from the same field of endeavor, data presentation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the color coded background of Jamieson (**Jamieson: Column 6, Line 64 - Column 7, Line 3**) with the data plots of Cook and Leftwich.

The motivation for doing so would have been to easily provide additional information to the user and to possibly provide navigation to more detailed information. (**Jamieson: Column 6, Line 64 - Column 7, Line 3**)

43. Therefore it would have been obvious to combine the color coded background of Jamieson with the data plots of Cook and Leftwich for the benefit of providing additional information to the user and possibly providing navigation to more detailed information to obtain the invention as specified in Claim 12.

#### **VIII. RELEVANT ART CITED BY THE EXAMINER**

44. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

The following references teach methods for acquiring and monitoring network traffic data:

Baker et al. (US Patent No. 6,266,700)

Sufleta (US Patent No. 6,785,237)

Cafarelli et al. (US Patent No. 6,760,845)

The following references teach methods of displaying data collections using a graphical user interface and possessing zoom functionality:

Baker et al. (US Patent No. 5,953,006)

Wichelman (US Patent No. 6,785,540)

## **IX. CLOSING COMMENTS**

### **Conclusion**

#### **a. STATUS OF CLAIMS IN THE APPLICATION**

45. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. ' 707.07(i):

##### **a(1). CLAIMS REJECTED IN THE APPLICATION**

46. Per the instant office action, claims 1-29 have received a first action on the merits and are subject of a first action non-final.

#### **b. DIRECTION OF FUTURE CORRESPONDENCES**

47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. McFadden whose telephone number is (571)272-8013. The examiner can normally be reached on Monday-Friday 8:30 - 5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manorama Padmanabhan can be reached on (571)272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

IMPORTANT NOTE

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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